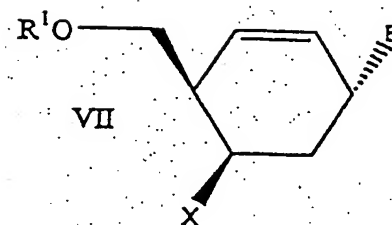
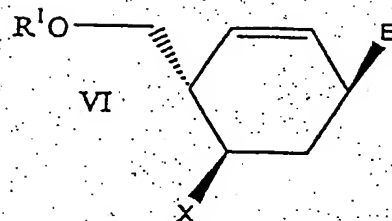
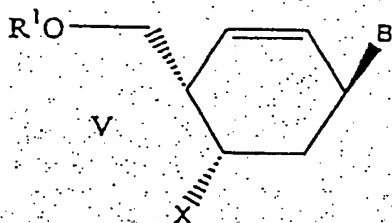
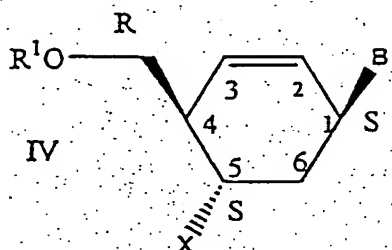
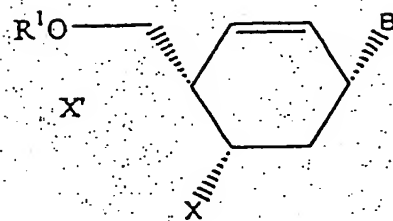
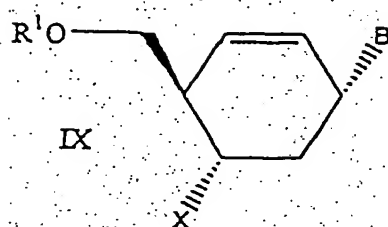
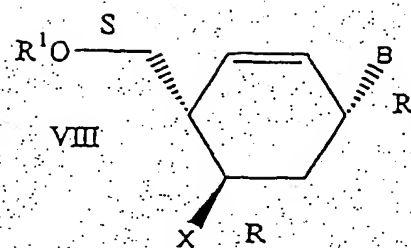


~~Please amend claim 3 as follows:~~

3. (Amended) Compound according to claim 1, selected from the group of compounds consisting of IV, V, VI, VII, VIII, IX, X and X':





~~Please amend claim 4 as follows:~~

4. (Amended) Compound according to claim 1, wherein the C<sub>1</sub> bearing B substituent and the C<sub>5</sub> bearing X substituent both have the (S)-configuration, and the C<sub>4</sub> bearing -OR<sup>1</sup> substituent has the (R)-configuration, as depicted by formula IV in claim 3.

~~Please amend claim 5 as follows:~~

5. (Amended) Compound according to claim 1, wherein the C<sub>1</sub> bearing B substituent and the C<sub>5</sub> bearing X substituent both have the (R)-configuration, and the C<sub>4</sub> bearing -OR<sup>1</sup> substituent has the (S)-configuration, as depicted by formula VIII in claim 3.

~~Please amend claim 6 as follows:~~

6. (Amended) Compound according to claim 1, wherein X is represented by a hydroxyl group in the (S)-configuration.

~~Please amend claim 7 as follows:~~

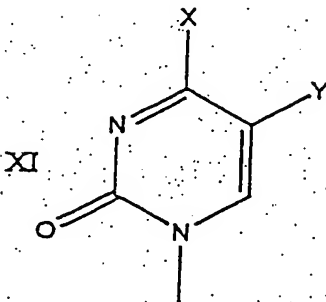
7. (Amended) Compound according to claim 1, wherein X is hydroxyl in the (R)-configuration.

~~Please amend claim 8 as follows:~~

8. (Amended) Compound according to claim 1, wherein B is derived from the group consisting of pyrimidine bases.

~~Please amend claim 9 as follows:~~

9. (Amended) Compound according to claim 7, wherein the pyrimidine base has the general formula XI:



wherein X is chosen from the group consisting of:

- OH, NH<sub>2</sub>, and NHQ,

wherein;

- Q is selected from the group consisting of:

OH and C<sub>1-5</sub> alkyl, and

- Y is selected from the group consisting of:

H, F, Cl, Br, I, C<sub>1-5</sub> alkyl, haloethyl and CH=CH-R, wherein R represents hydrogen, halogen or C<sub>1-5</sub> alkyl, and wherein haloethyl contains from 1 to 4 F, Cl or Br atoms.

*15 Cont*  
~~a Please amend claim 10 as follows:~~

10. (Amended) Compound according to claim 1, wherein B is selected from the group consisting of substituted and unsubstituted adenine, guanine, 2,6-diaminopurine, hypoxanthine and xanthine.

~~a Please amend claim 11 as follows:~~

11. (Amended) Compound according to claim 1, wherein the B is selected from the group consisting of aza, deaza, deoxy and deamino analogues of the heterocyclic rings.

~~a Please amend claim 12 as follows:~~

12. (Amended) Compound according to claim 1, wherein the protecting group is selected from the group consisting of a silyl protecting group, a benzoyl protecting group and a C<sub>6</sub>H<sub>5</sub>-CH= group.

~~a Please amend claim 13 as follows:~~

13. (Amended) Compound according to claim 1, selected from the group consisting of:

- 9-[1S,4R,5S)-5-hydroxy-4-hydroxymethyl-2-cyclohexenyl] guanine, and

- 9-[1R,4S,5R)-5-hydroxy-4-hydroxymethyl-2-cyclohexenyl].

~~a Please amend claim 14 as follows:~~

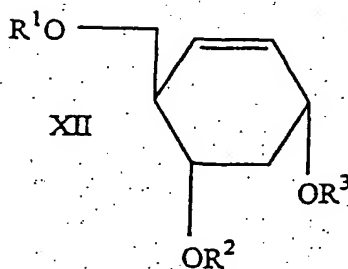
14. (Amended) Compound according to claim 1 selected from the group consisting of:

- 9-[(1S,4R,5S)-5-(tert-Butyldimethylsilyloxy)-4-(tert-butyldimethylsilyloxymethyl)-2-cyclohexenyl] adenine
- 9-[(1S,4R,5S)-5-Hydroxy-4-hydroxymethyl-2-cyclohexenyl]adenine.
- 9-[(1S,4R,5S)-5-(tert-butyldimethylsilyloxy)-4-(tert-butyldimethylsilyloxymethyl)-2-cyclohexenyl]-2-amino-6-chloropurine
- 9-[(1S,4R,5S)-5-hydroxy-4-hydroxymethyl-2-cyclohexenyl]guanine
- 9-[(1R,4S,5R)-5-Benzoyloxy-4-benzoyloxymethyl-2-cyclohexenyl] adenine
- 9-[(1R,4S,5R)-5-hydroxy-4-hydroxymethyl-2-cyclohexenyl] adenine
- 9-[(1R,4S,5R)-5-Benzoyloxy-4-benzoyloxymethyl-2-cyclohexenyl] guanine, and
- 9-[(1R,4S,5R)-5-Hydroxy-4-hydroxymethyl-2-cyclohexenyl] guanine.

~~a Please amend claim 15 as follows:~~

15. (Amended) Process for providing the compound of claim 1, including, the (-) enantiomer, the (+) enantiomer, and pharmaceutically acceptable salts and esters thereof, said process comprising the steps of:

- providing cyclohexenyl compound of the general formula XII;

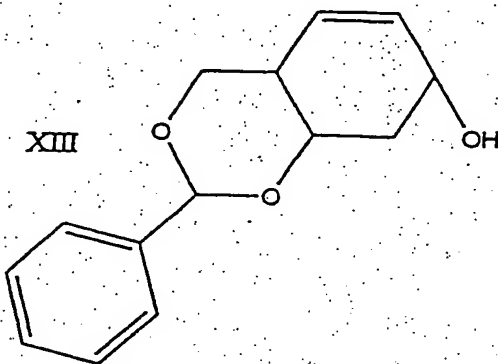


A5 cont.

- wherein  $R^1$  and  $R^2$  are protecting groups and  $R^3$  is a leaving group or a Hydrogen atom, followed by the step of substituting the  $OR^3$  group by a pyrimidine or purine base.

Please amend claim 18 as follows:

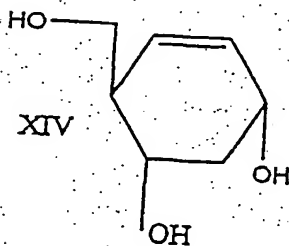
18. (Amended) Process according to claim 15, wherein the compound of general formula XII has the chemical formula XIII;



including analogues thereof either in a racemate form or separated isomers thereof.

~~Please amend claim 19 as follows:~~

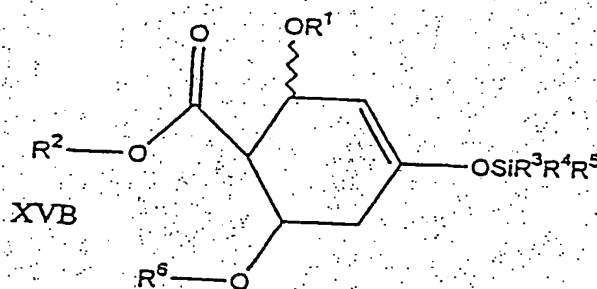
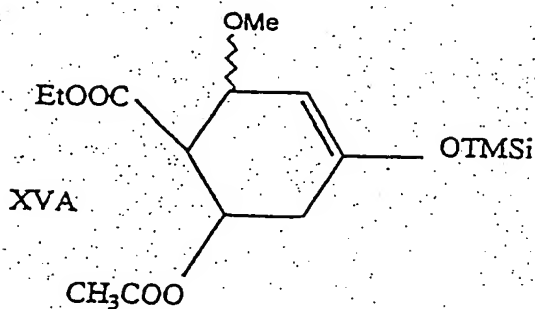
19. (Amended) Process according to claim 15, wherein compound XIII is provided by reacting ( $\pm$ ) 4-hydroxymethyl-cyclohex-2-en-1,5 Diol of formula XIV;



with a benzaldehyde analogue and a Lewis acid.

~~Please amend claim 20 as follows:~~

20. (Amended) Process according to claim 15, wherein compound XIV is provided by the reduction of compound selected from the group consisting of XVA and XVB;



wherein for SVB:

- $R^1$  and  $R^2$  are alkyl or alkenyl moieties,

wherein:

- $R^1$  and  $R^2$  are the same or different, and
- alkyl is a saturated, substituted or unsubstituted hydrocarbon radical having from 1 to 20, carbon atoms and being straight or branched chain, and
- alkenyl is the unsaturated congener of the alkyl group, and
- $R^3$ ,  $R^4$  and  $R^5$  are alkyl, alkenyl or aryl moieties, wherein:

- $R^3$ ,  $R^4$  and  $R^5$  are the same or different, and
- alkyl is a saturated, substituted or unsubstituted straight or branched chain hydrocarbon radical having from 1 to 20 carbon atoms and
- alkenyl is the unsaturated congener of the alkyl group, and
- aryl represents phenyl or substituted phenyl, and

$R^6$  is an alkyl, alkenyl or acyl moiety, wherein

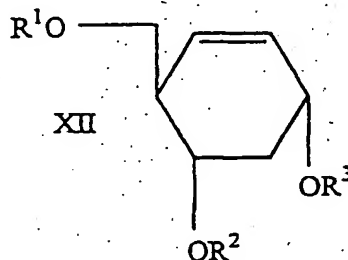
- alkyl is a saturated, substituted or unsubstituted hydrocarbon straight or branched chain radical having from 1 to 20 carbon atoms,
- alkenyl is the unsaturated congener of the alkyl group, and
- acyl is an alkanoyl or aroyl moiety, wherein alkanoyl is an alkyl carbonyl radical, wherein alkyl is as described above and aroyl represents benzoyl, substituted benzoyl or naphthoyl.

*A6 cont.*  
~~Please amend claim 21 as follows:~~

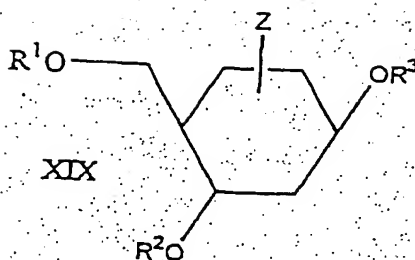
21. (Amended) Process according to claim 20, wherein compound XVA or XVB is provided by a Diels-Alder reaction, by the cyclo addition of a suitable diene and dienophile.

Please amend claim 24 as follows:

*A7*  
 24. (Amended) A six membered, at least partially unsaturated, carbocyclic nucleoside compound, including the (-) enantiomer, the (+) enantiomer, and pharmaceutically acceptable salts and esters thereof, the compounds represented by a general formula selected from the group consisting of XII and XIX;







wherein:

- Z represents the presence of 1 or more double bonds in the carbocyclic ring,
- R<sup>1</sup> and R<sup>2</sup> are protecting groups and R<sup>3</sup> is a leaving group or a Hydrogen atom.

*AL7 cont.*  
~~Please amend claim 25 as follows:~~

25. (Amended) Compound according to claim 24, wherein:

R<sup>1</sup> and R<sup>2</sup> are the same or different and hydrogen, alkyl, alkenyl, acyl or phosphate moieties are represented, or R<sup>1</sup> and R<sup>2</sup> represent a cyclic protecting group, wherein:

- alkyl is a saturated, substituted or unsubstituted straight or branched chain hydrocarbon radical having from 1 to 20 carbon atoms, and
- alkenyl is the unsaturated congener of the alkyl group, and
- acyl is an alkanoyl or aroyl moiety, wherein alkanoyl is an alkyl carbonyl radical, wherein alkyl is as described above and aroyl represents benzoyl, substituted benzoyl or naphthoyl; and

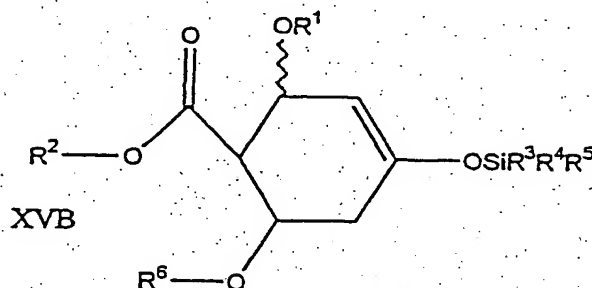
R<sup>3</sup> represents a hydrogen, an alkylsulfonyl or an arylsulfonyl moiety, wherein:

- alkyl is a saturated, substituted or unsubstituted hydrocarbon radical having from 1 to 6 carbon atoms and straight or branched chain, and

- aryl represents phenyl or substituted phenyl.

*a* ~~Please amend claim 26 as follows:~~

26. (Amended) A cyclohexenyl compound, including the (-) enantiomer, the (+) enantiomer, and pharmaceutically acceptable salts and esters thereof, the compound represented by the general formula XVB;



wherein  $R^1$  and  $R^2$  are alkyl or alkenyl moieties, wherein

- $R^1$  and  $R^2$  are the same or different, and
- alkyl is a saturated, substituted or unsubstituted straight or branched chain hydrocarbon radical having from 1 to 20 carbon atoms,
- alkenyl is the unsaturated congener of the alkyl group, and
- $R^3$ ,  $R^4$  and  $R^5$  are alkyl, alkenyl or aryl moieties, wherein:
  - $R^3$ ,  $R^4$  and  $R^5$  are the same or different, and
  - alkyl is a saturated, substituted or unsubstituted straight or branched chain hydrocarbon radical having from 1 to 20 carbon atoms and,
  - alkenyl is the unsaturated congener of the alkyl group, and
  - aryl represents phenyl or substituted phenyl, and

$R^6$  is an alkyl, alkenyl or acyl moiety, wherein:

- alkyl is a saturated, substituted or unsubstituted straight or branched chain hydrocarbon radical having from 1 to 20 carbon atoms, and

- 07 cont.
- alkenyl is the unsaturated congener of the alkyl group, and
  - acyl is an alkanoyl or aroyl moiety, wherein alkanoyl is an alkyl carbonyl radical, wherein alkyl is as described above and aroyl represents benzoyl, substituted benzoyl or naphthoyl.

Please amend claim 34 as follows:

34. (Amended) Compound according to claim 24 selected from the group consisting of:

- 08
- (4S,5R)-5-Benzoyloxy-4-benzoyloxymethyl-cyclohex-2-en-1-one,
  - (1S,4S,5R)-5-Benzoyloxy-4-benzoyloxymethyl-cyclohex-2-en-1-ol,
  - (4R,5S)-4-tert-Butyldimethylsilyloxymethyl-5-tert-butyldimethylsilyloxy-cyclohex-2-en-1-one, and
  - (1R,4R,5S)-5-(tert-Butyldimethylsilyloxy)-4-(tert-butyldimethylsilyloxymethyl)-cyclohex-2-en-1-ol.

~~a Please amend claim 35 as follows:~~

35. (Amended) Compound obtained by the process of claim 15.

~~a Please amend claim 36 as follows:~~

36. (Amended) Pharmaceutical composition comprising a compound according to claim 1.

~~a Please amend claim 37 as follows:~~

37. (Amended) A pharmaceutical composition as claimed in claim 1, having antiviral activity towards herpetic viruses.

Please amend claim 39 as follows:

39. (Amended) A pharmaceutical composition as claimed in claim 38, having a form which is selected from the group consisting of powders, suspensions, solutions, sprays, emulsions, unguents and creams.

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